



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the Application of: **MORIIZUMI, Kiyokazu**

Serial No.: **09/783,598**

Group Art Unit: **2827**

Filed: **February 15, 2001**

Examiner: **T. DINH**

**P.T.O. Confirmation No.: 4350**

For: **FRONT-AND-BACK ELECTRICALLY CONDUCTIVE SUBSTRATE AND  
METHOD FOR MANUFACTURING SAME**

**REQUEST FOR RECONSIDERATION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

July 10, 2003

Sir:

In response to the Office Action dated **March 12, 2003**, extended to **July 12, 2003** by a one-month Petition for Extension of Time, reconsideration of the claims is respectfully requested in view of the following remarks.

**REMARKS**

Claims 1 - 16 remain pending, of which claims 7 - 16 were withdrawn from consideration. No amendments were made. Reconsideration of the claims is respectfully requested in view of the following remarks.

In response to the Amendment dated December 20, 2002, the present Office Action changed the previous prior art rejections to rely upon the new primary reference to **Watanabe et al.** (USP 5,319,159), but still relied upon the further reference to **Hawkins et al.** (USP 6,258,286). According to this new prior art rejection, the Office Action relied upon the disclosures in **Watanabe** for a substrate 1 that has through holes 8 filled with epoxy resin filler 9 that allegedly corresponds to the present claimed posts composed of a material that can be etched. The Office Action acknowledged that **Watanabe** does not disclose the epoxy resin filler 9 being anisotropically etched, and relied upon the further reference to **Hawkins** for an anisotropic etching process.

However, it is submitted that the epoxy resin filler of **Watanabe** would not be anisotropically etched and would not meet the present claimed limitation of "a material that can be anisotropically etched." As described in **Watanabe**, the epoxy resin is applied through a screen printing process to fill the through hole vias 8 and is allowed to solidify. Any overflow may be removed and flattened by *mechanical* planning means (*see e.g.*, column 4, lines 10 - 23). Such mechanical planning is completely different from an anisotropic etching process, even the type disclosed in **Hawkins**. There is also no motivation to apply anisotropic etching techniques to flatten the solidified overflow epoxy resin of **Watanabe**. Therefore, the present claimed invention would still not be achieved even if

**Watanabe** was somehow combined with the teachings of **Hawkins**. For at least these reasons, the present claimed invention patentably distinguishes over the prior art.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, WESTERMAN & HATTORI, LLP



John P. Kong  
Attorney for Applicant  
Reg. No. 40,054

JPK/kal  
Atty. Docket No. **010153**  
Suite 1000  
1725 K Street, N.W.  
Washington, D.C. 20006  
(202) 659-2930



23850

PATENT TRADEMARK OFFICE

Enclosures: One-Month Petition for Extension of Time